

REMARKS/ARGUMENTS

Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 1-65 are pending in the application.

Allowable Subject Matter

Applicants note with appreciation the indication on page 9 of the Office Action that claims 14-17, 31-34 and 42-44 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants submit this is not necessary in view of the following remarks.

35 U.S.C. §103 Rejections

Claims 1-6, 10-11, 18-23, 27-28, 35-37, 38-40 and 45 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Gainey et al. (U.S. Patent Pub. No. 2004/0157551). Claims 7-9, 24-26, 41 and 46 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Gainey in view of Lusky et al. (U.S. Patent No. 7,315,573). Claims 13 and 30 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Gainey in view of Leslie et al. (U.S. Patent No. 6,404,755). Claim 47 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over in view of Gainey in view of Lusky et al., and in further view of Irving (U.S. Patent No. 6,163,276). Applicants respectfully traverse each of these rejections for at least the following reasons.

Regarding claim 1, Gainey merely teaches a repeater that extends the range of a wireless communication system which can use Time Division Duplex (TDD) protocols. The device translates signals received on a first radio frequency channel to a second radio frequency channel.

The repeater monitors one or more channels for transmissions. When a transmission on one channel is detected, the repeater is configured to translate the received signal to another channel where it is then transmitted (Abstract).

Specifically, Gainey teaches a repeater 100 having of at least one resonating element, such as an antenna 300, an isolator 305, and receive signal processing elements including a Low Noise Amplifier (LNA) 310, splitter 315, a frequency conversion device, such as mixers 320 and 321, further splitters 323 and 324, delay line filters 360, 361, and switch 355. A pair of local oscillators 340 and 341 is also selected under control of switch 345. A transmit signal processing portion includes a transmit frequency converter 350, transmit filter 335, Variable Gain Amplifier (VGA) 330, and Power Amplifier (PA) 325. Detection and control circuitry, consisting of bandpass filters 365, 366, detectors 370, 371, low pass filters 375, 376, Analog-to-Digital Converters (ADCs) 380, 381, and microprocessor controller 385 are used to generate various control signals. These control signals select the operation of various other components such as the switches, local oscillators, variable gain amplifiers and the like. The ADCs 380 and 381 provide digital signals to the microprocessor 385. (See paragraphs [0036] and [0037].)

The microprocessor 325 determines when the detected voltage is above a predetermined threshold indicating activity. In such an instance, the switches 345, 355 are operated accordingly to allow selection of one of the delay line filter 360 or 361 outputs depending upon the channel in which activity was detected. (See paragraph [0046]; emphasis added.)

However, Gainey fails to teach or suggest, at least, "establishing a first threshold associated with a first of the at least two frequency channels and a second threshold associated with a second of the at least two frequency channels," as recited in claim 1.

In contrast to Applicants claimed combinations, Gainey merely utilizes a single, predetermined threshold for indicating activity. A predetermined threshold would be merely pre-set, and not established as recited in claim 1, for example.

Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 1. Claim 18 recites related subject matter to claim 1 in this respect, and is therefore allowable for reasons similar to those given above.

Further, Applicants respectfully submit that the Lusky, Leslie, and Irving references, as applied, fail to cure the above-noted deficiencies of Gainey in relation to independent claims 1 and 18. Accordingly, the remaining dependent claims are allowable at least by virtue of their dependency on the above-identified independent claims 1 and 18. See MPEP § 2143.01. Moreover, these claims recite additional subject matter, which is not suggested by the documents taken either alone or in combination.

New Claims

Applicants respectfully submit that new independent claims 48 and 57 recite similar subject matter to the above-discussed independent claims 1 and 18 and are allowable for similar reasons. Further, Applicants submit that dependent claims 49-56 and 59-65 recite subject matter related to allowable claims 31-34 and 42-44 and should also be considered to be allowable.

Official Notice

Finally, the Examiner took Official Notice in the rejection of claims 2, 4, 21, 19 and 45 in an attempt to cure the admitted deficiencies of the cited references. Specifically, regarding claim 2 and 19, the Examiner asserted that "the use of saw tooth controls is well known and widely used in the communications art." (See Office Action: page 3, lines 15-17.)

Regarding claim 4 and 21, the Examiner asserted that “timeouts are well known and widely used in the wireless communications art.” (See Office Action: page 4, lines 4-9.)

Regarding claim 45, the Examiner asserted that “the use of a saw filter is well known and widely used in the communications art. Therefore, the examiner is taking notice on this limitation (i.e. using a saw filter and adding a delay with the saw filter).” (Office Action: page 6, lines 4-8).

Applicants respectfully traverse the Examiner’s taking of Official Notice, and submit that these features are not common knowledge in the art and are capable of instant and unquestionable demonstration as being well-known, as required by MPEP 2144.02. Accordingly, Applicants request that Examiner either provide an affidavit in support of these assertions, provide a valid prior art reference(s) (if any exist), or withdraw the rejection.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, at the telephone number listed below.

Deposit Account Authorization

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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